

From: [Tzhone, Stephen](#)
To: [Rauscher, Jon](#); [Khoury, Ghassan](#)
Cc: [Sanchez, Carlos](#); [Villarreal, Chris](#)
Subject: FW: Minutes of Arkwood Meeting 4/29/15
Date: Wednesday, April 29, 2015 5:24:00 PM

From: Tzhone, Stephen
Sent: Wednesday, April 29, 2015 5:17 PM
To: Berg, Marlene
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: FW: Minutes of Arkwood Meeting 4/29/15

Ok, will do.

As discussed on the call, the risk assessors will proceed to evaluate if risk scenarios/receptors will need to be updated for any DUs or areas extending beyond the fence line. We will plan to use the same principal threat levels demonstration methodology (with the relevant numerical PRG for those areas).

The call was very informative, thanks for the updates and clarifications.

From: Berg, Marlene
Sent: Wednesday, April 29, 2015 4:59 PM
To: Tzhone, Stephen
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

Steve,

Yes. For any soil that would need to be brought in as a cover, it would need to be confirmed that soil dioxin does not exceed 730 pg/g.

Marlene

From: Tzhone, Stephen
Sent: Wednesday, April 29, 2015 5:56 PM
To: Berg, Marlene
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

Ok for the current cover. But I'm guessing HQ would want that verification sampling for the other DUs (or beyond), if a 6" cover would need to be brought in... correct?

From: Berg, Marlene
Sent: Wednesday, April 29, 2015 4:49 PM
To: Tzhone, Stephen



9595733

Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

Steve,

Please delete your first bullet. The unadjusted TEQ concentrations show that levels in the soil cover do not exceed 730 pg/g.

The ICs would be put into place for protectiveness w/r to direct contact.
And, the gw sampling would determine the protectiveness of the soil cover w/r of migration of soil dioxin to ground water.

Thanks, Marlene

From: Tzhone, Stephen
Sent: Wednesday, April 29, 2015 4:52 PM
To: Berg, Marlene
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: RE: Minutes of Arkwood Meeting 4/29/15

I just want to confirm that this demonstration (see highlight) would consist of these three parts:

- soil dioxin sampling of cover to ensure its below 730 ppt dioxin PRG
- gw dioxin sampling of possible pathways to ensure non-leaching and transport of dioxin
- ICs in place

Please clarify or confirm, thanks.

From: Berg, Marlene
Sent: Wednesday, April 29, 2015 3:32 PM
To: Tzhone, Stephen
Cc: Poore, Christine; Crumbling, Deana; Bartenfelder, David
Subject: Minutes of Arkwood Meeting 4/29/15

Steve T, Carlos, Chris V, Jon, Ghassan, and contract support
Marlene and Deana.

Ground water tracer study.

Region 6 has been working with Scott Huling from ORD/Ada who will be sending comments on tracer report.

Dave B is deferring to Ada.

Cleanup Levels

- We support calculation of 730 pg/g for a soil screening level for industrial use and 12,100 pg/g for maintenance worker.

- Maintenance worker for current land use, industrial for future land use. As we consider both current and future land use in determining protectiveness, we support the use of 730 pg/g as a soil screening level for the site.

Principal Threat Levels

- OSRTI will confirm with Region 6 that dioxin-contaminated soil beneath the soil cover does not constitute principal threat waste. This applies to toxicity of dioxin in soil, not mobility.
- PRP will need to demonstrate that 6 in soil cover can safely contain low-level waste w/r to direct contact and migration to ground water.

Site TEQ concentrations

- Deana has provided rationale for why unadjusted, not adjusted, TEQ concentrations is appropriate.
- Deana has provided additional comments for the PRP; these comments do not actually affect TEQ concentrations.

Soil Cover

- Unadjusted TEQ concentrations are below 730 pg/g

Site areas beyond soil cover

- Unadjusted TEQ concentrations have been found above 730 pg/g for all DUs except DU for soil cover.

Beyond Site Boundary

- Unadjusted TEQ concentrations have been found above 730 pg/g from DU 5 and DU 7 which are beyond site boundary.
- Additional work will be needed to determine extent of contamination/risk beyond site boundary in addition to DU 5 and DU 7 areas.